

Technical Data Sheet

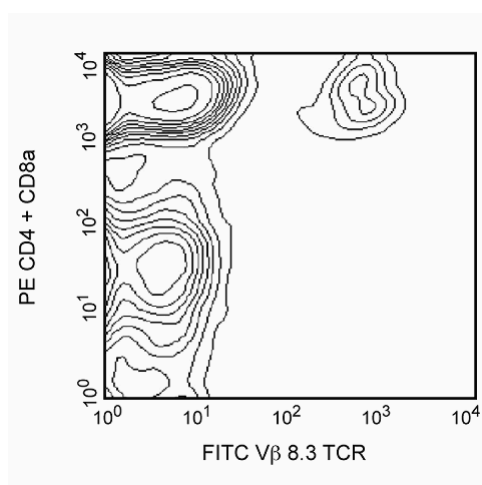
FITC Hamster Anti-Mouse V β 8.3 T-Cell Receptor

Product Information

Material Number:	553663
Size:	0.25 mg
Concentration:	0.5 mg/ml
Clone:	1B3.3
Immunogen:	V β 8.3 TCR-expressing mouse Th1 clone 3.L2
Isotype:	Armenian Hamster IgG3, λ 1
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 1B3.3 antibody reacts with the V β 8.3 T-cell Receptor (TCR), but not the V β 8.1 nor V β 8.2 TCR, of mice having the *b* haplotype (e.g., A, AKR, BALB/c, CBA/Ca, CBA/J, C3H/He, C57BL, C58, DBA/1, DBA/2) of the *Tcrb* gene complex. The *Tcrb-V β 8* subfamily gene loci are deleted in mice having the *a* (e.g., C57BR, C57L, SJL, SWR) or *c* (e.g., RIII) haplotype. V β 8.3 is one of the restricted TCR β chains expressed by NK-T cells. Staphylococcal enterotoxin B, in association with antigen-presenting cells expressing I-A and/or I-E, stimulates lymphocytes bearing V β 8 TCR and selectively eliminates those T cells *in vivo*. V β 8.3 TCR-bearing T-cell clones can be activated by 1B3.3 mAb. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.



Two-color analysis of the expression of V β 8.3 TCR on peripheral lymphocytes. C57BL/6 lymph node cells were incubated simultaneously with FITC-conjugated 1B3.3, PE-conjugated anti-mouse CD4 RM4-5 (Cat. No. 553048/553049), and PE-conjugated anti-mouse CD8a 53-6.7 (Cat. No. 553032/553033) monoclonal antibodies. Flow cytometry was performed on a BD FACScan™ flow cytometry system.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

For flow cytometry of cell suspensions from peripheral lymphoid tissues, it is recommended that multicolor staining be performed to distinguish T lymphocytes from non-T cells.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553048	PE Rat Anti-Mouse CD4	0.1 mg	RM4-5
553032	PE Rat Anti-Mouse CD8a	0.1 mg	53-6.7
553979	FITC Hamster IgG3 λ 1 Isotype Control	0.25 mg	A19-4

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.

References

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